



# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

JANUARY 21, 2003

<u>TM GRAIN TRANSPORT COST INDICATORS</u>	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Ocean</u>	
				<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 01/07	99	122	133	125	147
Compared to Last Week	<b>unchanged</b>	<b>up</b>	<b>up</b>	<b>up</b>	<b>up</b>
*Indicator: Base Year 2000=100; Cost Data, Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel, based on Routes to Japan					

Jan. 26-31	Wheat Industry Conference	Albuquerque, NM	202-547-7800 (ph) <a href="mailto:wheatworld@wheatworld.org">wheatworld@wheatworld.org</a>
Feb. 5-7	National Grain Trade Council (NGTC) Transportation, Elevator & Grain Merchants (TEGMA) 2003 Annual Meeting	Marco Island, FL	Tyson Redpath 202-842-0400 Ext. 101(ph) 202-789-7223 (fax) <a href="mailto:redpath@ngtc.org">redpath@ngtc.org</a>
Feb. 9-12	U.S. Grains Council Annual Meeting	Guadalajara, MX	202-789-0789 (ph) <a href="mailto:grains@grains.org">grains@grains.org</a>
Feb. 11-13	World Ag Expo	Tulare, CA	614-292-4278 (ph)
Feb. 16-18	Annual Sorghum Industry Conference and 23 <sup>rd</sup> Biennial Research & Utilization Conf.	Albuquerque, NM	806-749-3478 (ph) <a href="mailto:conference@sorghumgrowers.com">conference@sorghumgrowers.com</a>
Feb. 20-21	USDA79 <sup>th</sup> Annual Agricultural Outlook Forum	Arlington, VA	202-314-3451 (ph) <a href="mailto:agforum@oce.usda.gov">agforum@oce.usda.gov</a>
Feb. 27-Mar. 1	Commodity Classic Trade Show	Charlotte, NC	Beth Musgrove 314-275-9915 (ph) <a href="mailto:musgrove@ncga.com">musgrove@ncga.com</a>
Mar. 10-12	American Farmland Trust National Conf.	Pacific Grove, CA	Doris Mittasch 413-589-9330 (ph) <a href="mailto:dmittasch@farmland.org">dmittasch@farmland.org</a>
Mar. 25-28	National Grain and Feed Association (NGFA) 107 <sup>th</sup> Annual Convention	Tucson, AZ	202-289-0873 (ph) 202-289-5388 (fax) <a href="mailto:ngfa@ngfa.org">ngfa@ngfa.org</a>
May 4-6	North American Rail Shippers Assoc. Annual Meeting	Washington, DC	202-639-2100 (ph)
May 5-7	American Feed Association Expo 2003	Minneapolis, MN	703-524-0810 (ph) <a href="mailto:afia@afia.org">afia@afia.org</a>
July 20-22	U.S. Grains Council, 43 <sup>rd</sup> Annual Board of Directors Meeting; 4 <sup>th</sup> International Grain Marketing Conference & Trade Show	Minneapolis, MN	202-789-0789 (ph) 202-898-0522 (fax) <a href="mailto:grains@grains.org">grains@grains.org</a>

Report is prepared by Deen Olowolayemo, Hooshang Fazel, and Johnny Hill, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at [www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm). E-mail comments and questions to [Surajudeen.Olowolayemo@usda.gov](mailto:Surajudeen.Olowolayemo@usda.gov).

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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

**Market Update: U.S. Origins to Export Position Price Spreads**

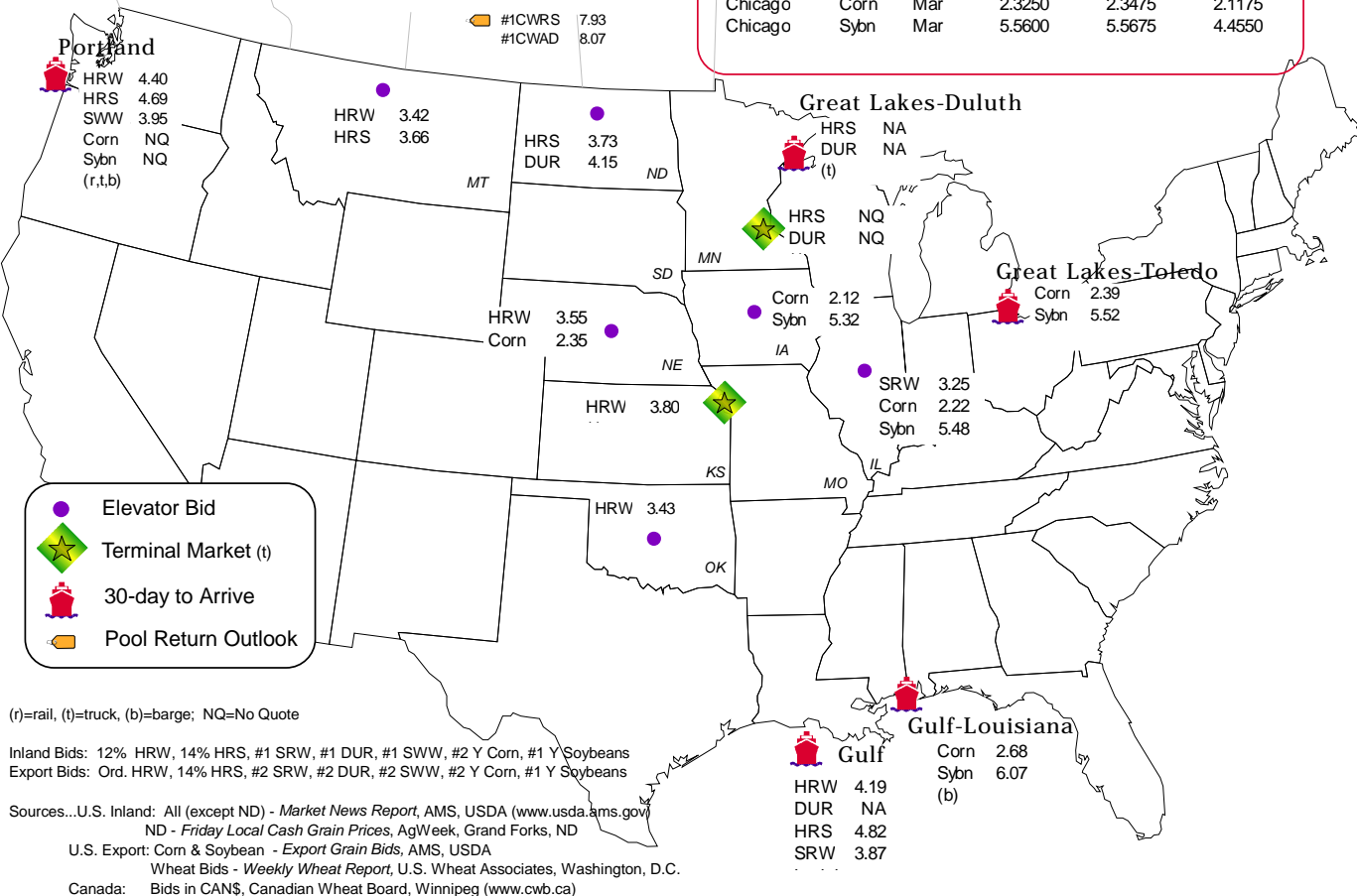
Per Bushel

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.23	-0.40
Corn	NE -- Gulf	-0.29	-0.31
Soybean	IA -- Gulf	-0.25	-0.75
HRW	KS -- Gulf	-0.47	-0.36
HRS	ND -- Portland	-1.17	-0.99

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

**Grain Bid Summary**

Futures:				01/17/2003	Week Ago 01/10/2003	Year Ago 01/18/2002
Kansas City	Wht	Mar		3.5025	3.4525	2.9375
Minneapolis	Wht	Mar		3.8200	3.7550	3.0450
Minneapolis	Dur	Mar		n.a.	n.a.	n.a.
Chicago	Wht	Mar		3.1675	3.1925	2.9800
Chicago	Corn	Mar		2.3250	2.3475	2.1175
Chicago	Sybn	Mar		5.5600	5.5675	4.4550



## RAIL TRANSPORTATION

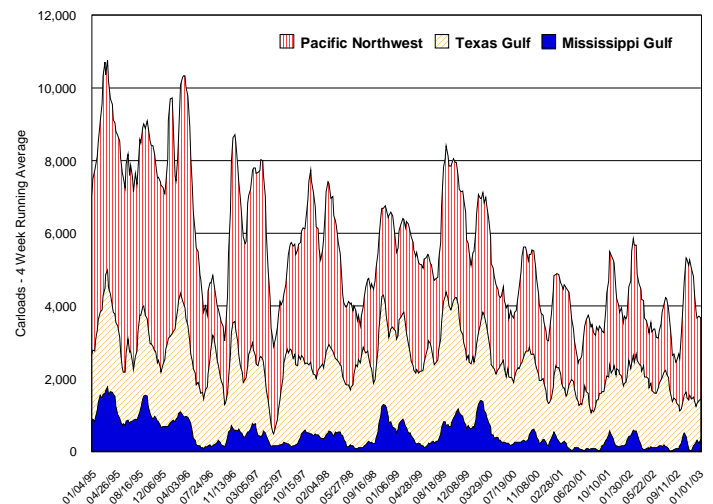
### Rail Deliveries to Port

Carloads

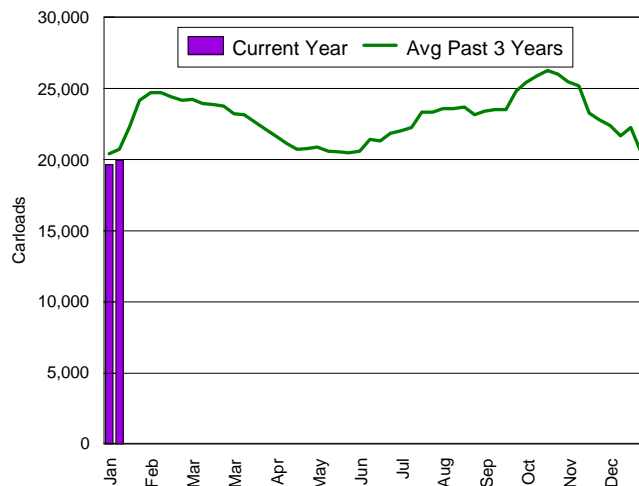
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
01/01/03	189	1,484	2,372	715	4,760
01/08/03	625	879	2,123	596	4,223
YTD 2003	814	2,363	4,495	1,311	8,983
YTD 2002	445	3,552	3,166	1,683	8,846
% YTD 2001	183%	67%	142%	78%	102%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

### Rail Deliveries to Port



### Grain Car Loadings for Class I Railroads



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

### Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
01/11/03	2,907	4,079	7,964	392	7,163	22,505	3,606	3,864
This Week Last Year	3,230	2,809	9,508	698	7,722	23,967	4,808	4,070
2003 YTD	2,646	2,642	6,606	639	6,226	18,759	3,385	2,299
2002 YTD	2,477	2,914	6,927	443	5,478	18,239	3,812	2,947
% of Last Year	107%	91%	95%	144%	114%	103%	89%	78%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

### U.S. Rail Carrier Grain Service Index\*

Nov-02	93.3	95.6	95.5	102.7	93.1	94.4
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Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service) for Rail Carrier

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Jan-03	Feb-03	Mar-03
COT/N. Grain	\$0	no bid	no bid
COT/S. Grain	\$0	\$0	\$0
GCAS/Region 1	\$6	no offer	no offer
GCAS/Region 2	\$30	\$2	\$2

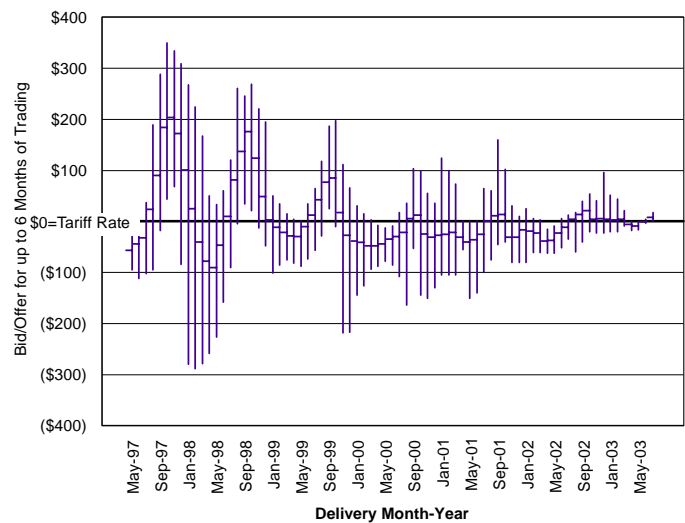
Source: Transportation &amp; Marketing/AMS/USDA.

(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Jan-03	Feb-03	Mar-03	Apr-03
BNSF-GF	\$5	\$4	\$1	(\$8)
UP-Pool	\$51	\$26	\$15	(\$6)

**Secondary Rail Market Bid****Tariff Rail Rates for Unit Train Shipments**

January 2002

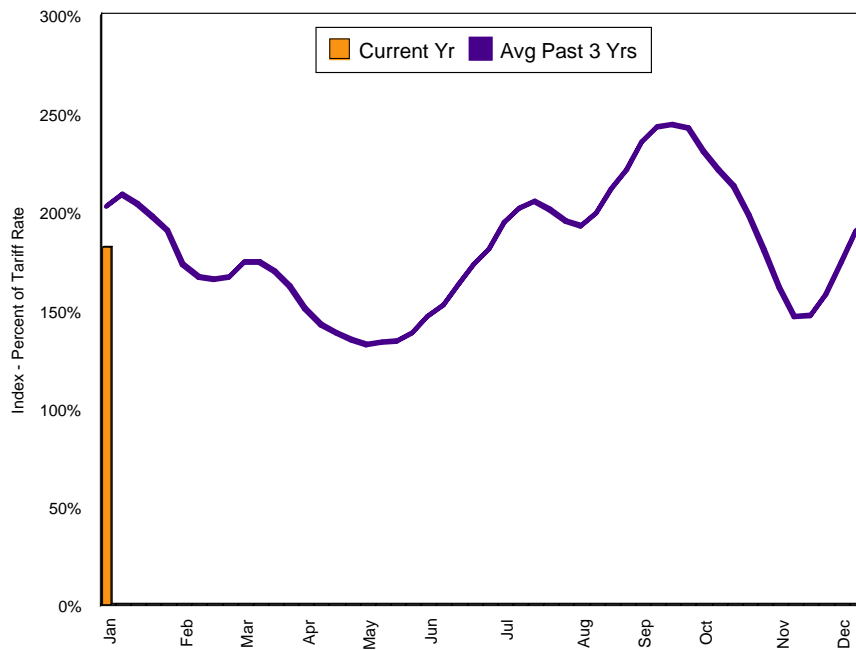
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel
01/06/03	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
01/06/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
01/06/03	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
01/06/03	43586	Wheat	Kansas City, MO	Portland, OR	\$4,420	\$48.72	\$1.33
01/06/03	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
01/06/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
01/06/03	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
01/06/03	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
01/06/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
01/06/03	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: [www.bnsf.com](http://www.bnsf.com)

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat &amp; Soybeans 60 lbs/bu

## BARGE TRANSPORTATION

### Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating barge rate per ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

#### BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	1/15/03	1/8/03	Feb. '03	Apr. '03
Twin Cities	nq	nq	nq	196
Mid-Mississippi	nq	nq	nq	170
Illinois River	237	160	195	156
St. Louis	216	136	167	134
Lower Ohio	163	133	145	135
Cairo-Memphis	130	120	124	128

Source: Transportation & Marketing /AMS/USDA; nq=no quote

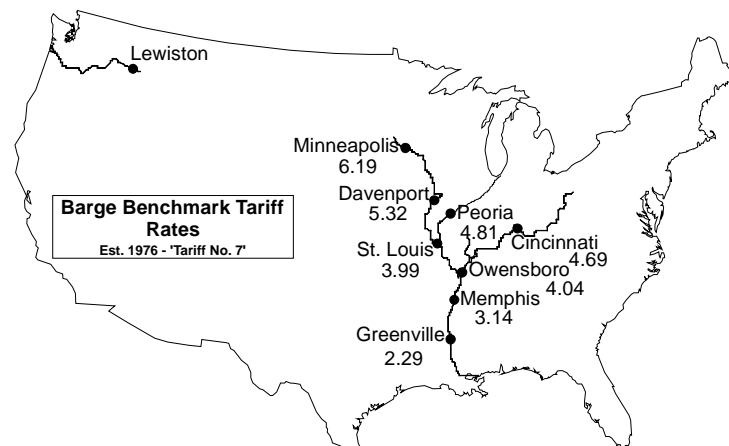
### BARGE FUTURES MARKET

#### Southbound Barge Freight Nominal/Cash Basis Values

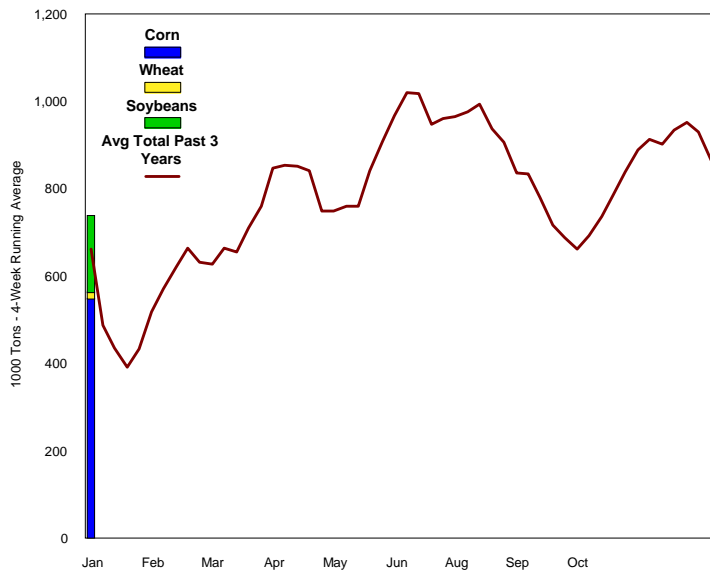
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
1/21/03	St. Louis	Feb	n/a	185
		Apr	n/a	145
		Jun	n/a	145
		Jul	n/a	160
	Illinois River	Aug	n/a	200
		Feb	n/a	210
		Apr	n/a	155
		Jun	n/a	160
		Jul	n/a	170
		Aug	n/a	

Source: St. Louis Merchants Exchange



### Barge Movements on the Mississippi River (Lock 27)



### Barge Grain Movements

for week ending 1/11/03

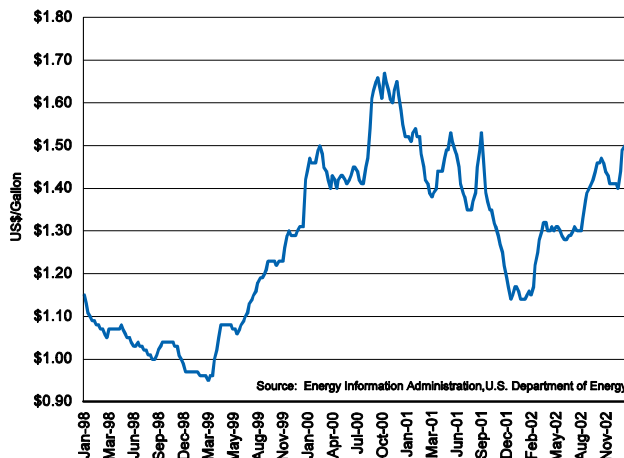
	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	443	11	183	648
Granite City, IL (L27)	446	26	164	647
Illinois River (L8)	394	11	199	604
Ohio River (L52)	41	2	43	134
Arkansas River (L1)	0	15	22	36
2002 YTD	879	63	408	1,437
2001 YTD	878	54	476	1,501
% of 2001 YTD	101%	117%	86%	96%
Total 2001	35,006	2,590	11,634	50,810

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

Source: U.S. Army Corp of Engineers.

## TRUCK TRANSPORTATION

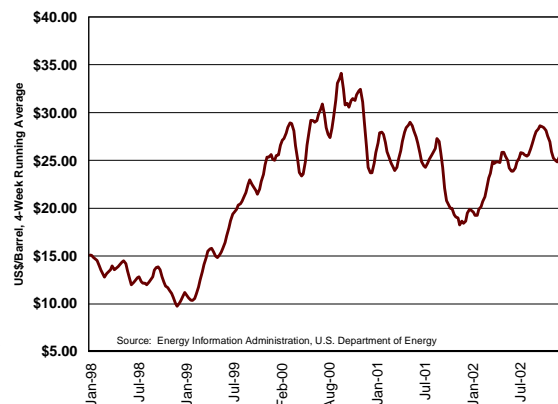
### Weekly U.S. Retail Road Diesel Price



Source: Energy Information Administration, U.S. Department of Energy

The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

### Weekly Brent Crude Price, Friday Close



Source: Energy Information Administration, U.S. Department of Energy

### Crude Oil Prices

US\$ per Barrel	This Week	Last Week
Light Sweet Crude (NYMEX)	32.69	31.27
Brent Crude	32.02	31.66

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

<b>GRAIN EXPORTS</b>
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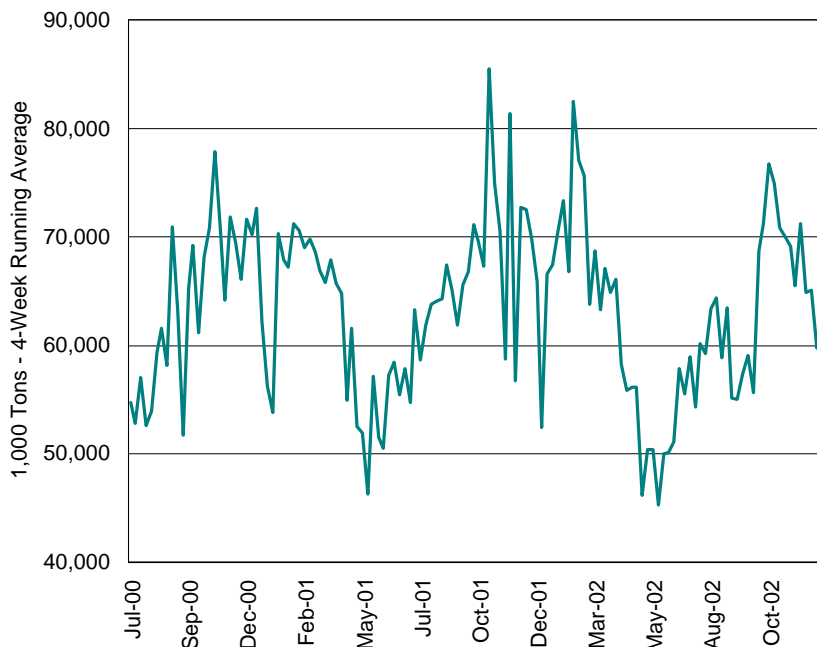
**U.S. Export Balances** (1,000 Metric Tons)

	HRW	SRW	Wheat HRS	SWW	DUR	All	Corn	Soybean	Total
<u>Unshipped Export Balances</u>									
01/09/03	986	532	1,103	526	113	3,260	5,900	8,355	17,515
This Week Year Ago	1,003	693	943	592	124	3,354	7,110	7,816	18,280
<u>Cumulative Exports-Crop Year</u>									
02/03 YTD	4,785	1,893	4,400	2,309	525	13,911	14,848	13,082	41,841
01/02 YTD	5,279	3,568	3,404	1,996	800	15,046	15,092	17,713	47,851
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942
97/98 Total	9,867	6,792	8,918	6,443	897	32,918	55,769	23,550	112,237

Source: Foreign Agricultural Service YTD-Year-to-Date ([www.fas.usda.gov](http://www.fas.usda.gov)) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
01/16/03	83	76	81	155	587	659	122	0	0	240	1,401	122
2003 YTD	277	212	178	329	1,151	1,419	231	6	0	666	2,899	237
2002 YTD	412	169	49	105	1,389	1,476	341	0	193	630	2,969	534
% of 2002 YTD	67%	125%	366%	314%	83%	96%	68%	-	0%	106%	98%	44%
2002 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462

Source: Federal Grain Inspection Service YTD-Year-to-Date

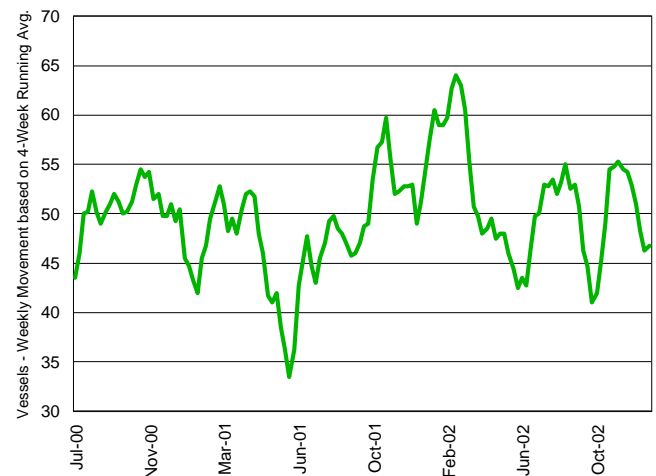
**U.S. Grain Inspected for Export****Select Canadian Port Export Inspections**

1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
Vancouver			
Prince Rupert	93	2	
Prairie Direct	1	8	2
Thunder Bay			1
St. Lawrence	2,377	1,356	184
2001/02 YTD	6,337	1,443	502
2002/03 YTD	2,471	1,367	187
% of Last Year	256%	106%	269%

Source: Canadian Grains Commission, Crop Year 8/1- 7/31

### Gulf Port Region Grain Vessel Loading Past 7 Days

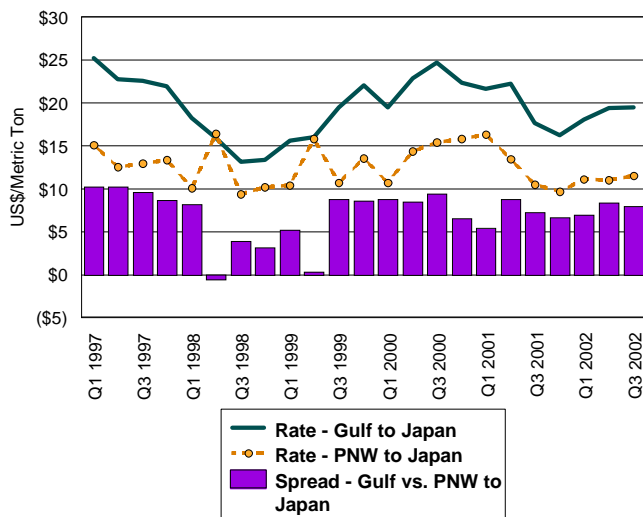


### Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
01/09/03	35	50	80	3	1
01/16/03	43	53	63	5	2
2001 Range	(13..65)	(28..64)	(46..81)	(1..18)	(4..20)
2001 Avg	36	48	63	9	12

Source: Transportation &amp; Marketing /AMS/ USDA

### Grain Vessel Rates to Japan



### Quarterly Ocean Freight Rates

Average Rates &amp; Percentage Changes, U.S. Dollars/Metric Ton

	2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change		2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$19.54	\$17.69	9%	Japan	\$11.57	\$11.46	10%
Mexico	\$7.14	-	-				
Venezuela	-	\$13.45	-				
N. Europe	-	\$12.06	-				
				<b>Argentina to</b>			
N. Africa	\$31.64	\$18.21	42%	Med. Sea	\$19.93	-	-
Med. Sea	\$11.92	\$12.05	-1%	N. Europe	-	\$16.22	-
Black Sea	-	-	-	Japan	-	\$29.40	-

Source: Transportation &amp; Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

### Ocean Freight Rates for Selected Shipments - week ending 1/18/03

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
U.S. Gulf	El Salvador	Wheat	Jan 15/20	22,000	\$22.00
U.S. Gulf	Germany	Heavy Grain	Jan 20/30	60,000	\$14.50
U.S. Gulf	Japan	Heavy Grain	Jan 15/20	42,000	\$25.50
U.S. Gulf	Japan	Heavy Grain	Jan 23/Feb7	54,000	\$27.50
U.S. Gulf	Japan	Heavy Grain	Jan 25/Feb5	54,000	\$27.90
U.S. Gulf	No. China	Heavy Grain	Jan 16/26	55,000	\$26.25
Hull (U.K.)	Adriatic Sea	Wheat	Jan 17/20	55,000	\$16.00

Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

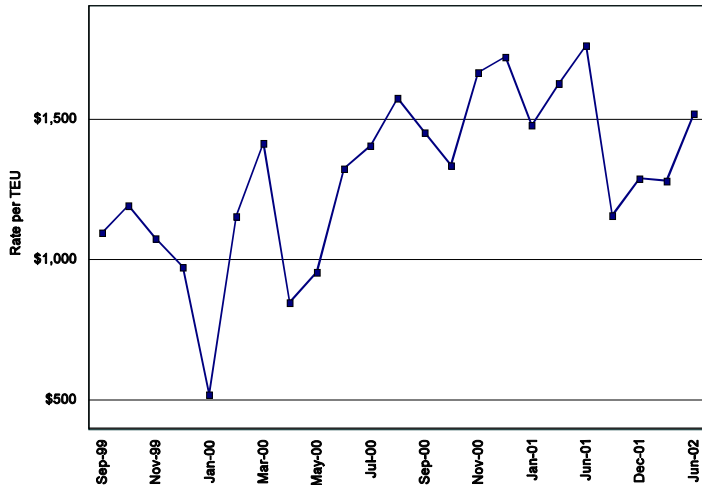
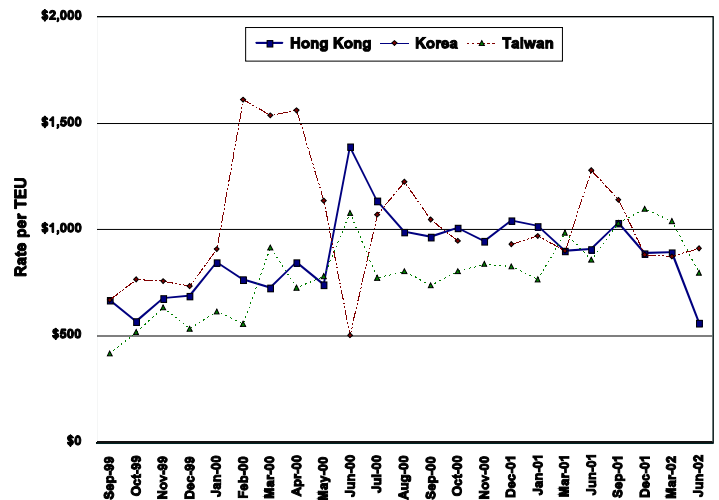


**Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line

Monthly Mkt. Share

Source: Transportation &amp; Marketing/AMS/USDA

**CONTAINER****Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.